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annual data 1981

COPPER • BRASS • BRONZE

copper supply & consumption

1961-1980

COPPER DEVELOPMENT ASSOCIATION INC.

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Preface

Original statistical data on the supply and consumption of copper and copper alloys in the United States are available from many governmental and private sources. In this report original data from these sources are brought together and rationalized by CDA and American Bureau of Metal Statistics Inc. to provide a set of data on copper supply and consumption that is both consistent and accurate in all aspects from mine to end-use market.

The main sources of information assembled here are the Bureau of Mines in the U.S. Department of the Interior, the Bureau of the Census and the Bureau of Industrial Economics in the U.S. Department of Commerce, and Copper Development Association Inc. Where data from different sources are conflicting, and where original data appear to be in error, the best judgment in CDA has been applied. General sources are shown in the tables throughout the report. Those interested to know the specific sources of any of the data should contact CDA.

The statistics are arranged in a logical sequence to trace the flow of copper in the U.S. economy from mining and scrap collection through smelting, refining and ingot making to the brass mills, wire mills, and foundries and then on to the final end-use markets. This flow is shown schematically on pages 4-5. On this schematic flowsheet the major statistics of copper supply and consumption in the United States for 1980 appear. Along with each major statistic on the chart, a reference is shown. This refe-

ence identifies the table in the report where details on that item, from 1961 through 1980, will be found. Most data for 1980 are preliminary.

There are four major tables in the report. *Table 1* covers supply of primary copper. *Table 2* presents data on the supply of copper from secondary sources. In *Table 3,* statistics on the consumption of primary and secondary metals by mills, foundries and other industries are summarized. Finally, *Table 4* details the supply of mill, foundry and powder products and their consumption in the five end-use market areas.

The arrangement of the data in the report can be illustrated with an example. Consider *Mine Production,* the upper left-hand box in the flowsheet on page 4. As shown in the box, mine production of copper in the United States totalled 1,295.5 thousand short tons in 1980. Beneath this figure a number appears referring to *Table 1, Item 1,* abbreviated *1(1)*. This means that in *Table 1,* on line (1), mine production is shown for the full period 1961 through 1980. In *Table 1,* on line (1), a further reference will be found after the item heading *Mine Production,* directing the reader to page 8. This reference means that further details on mine production appear on page 8. In fact, on page 8, a table entitled *Table 1, Item 1* presents the data on mine production by state for 1961 through 1980. In this way all the data on supply and consumption appear in logical sequence proceeding through the report, eliminating the need for explanatory text.

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Copper supply and consumption in the United States 1980

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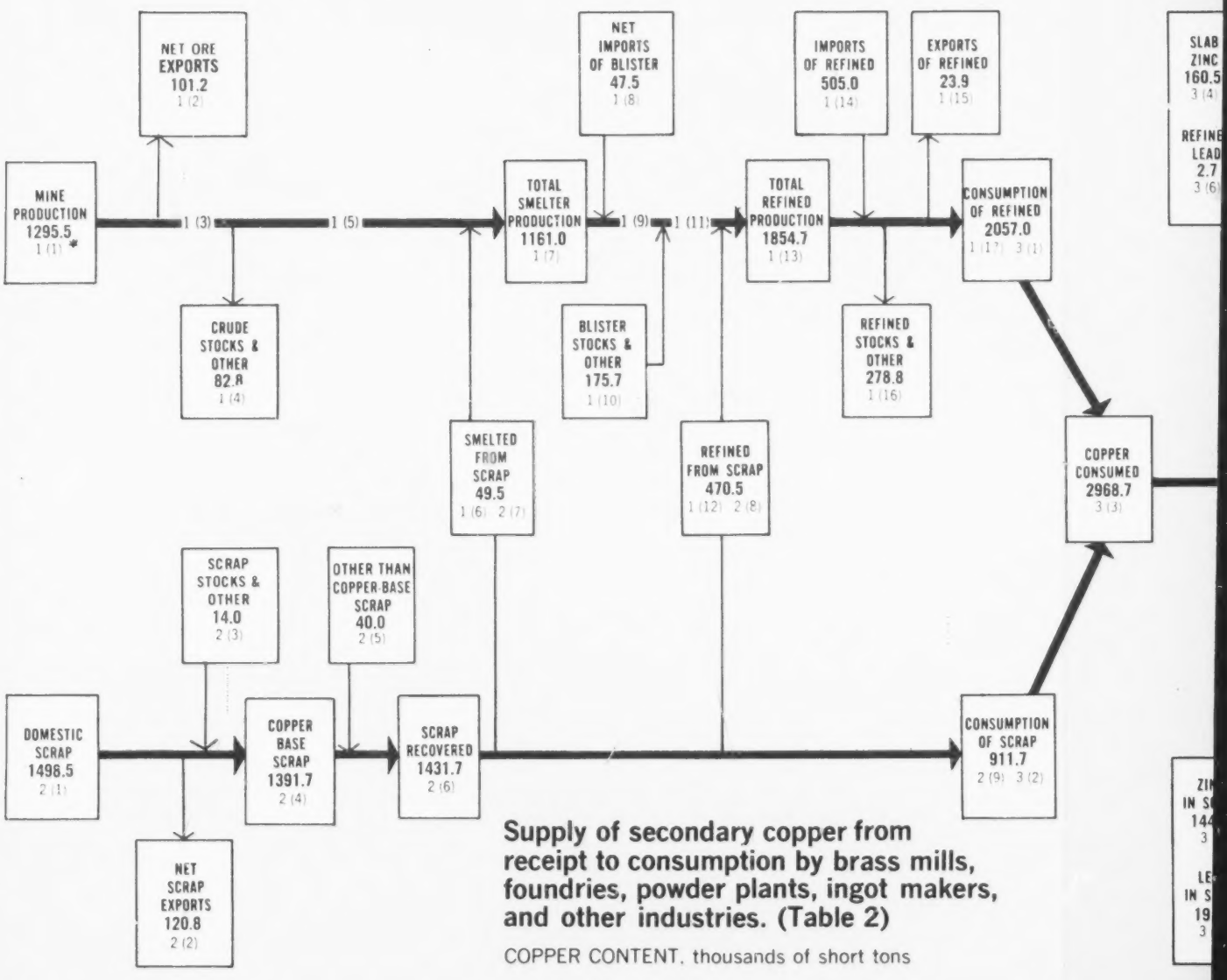
Supply of primary copper from mine to consumption by brass mills, wire mills, foundries, powder plants, ingot makers and other industries. (Table 1)

COPPER CONTENT, thousands of short tons


NET ORE EXPORTS 101.2 1 (2)
NET IMPORTS OF BLISTER 47.5 1 (8)
IMPORTS OF REFINED 505.0 1 (14)
EXPORTS OF REFINED 23.9 1 (15)
SLAB ZINC 160.5 3 (4)
MINE PRODUCTION 1295.5 1 (1)*
1 (3)
1 (5)
TOTAL SMELTER PRODUCTION 1161.0 1 (7)
1 (9)
1 (11)
TOTAL REFINED PRODUCTION 1854.7 1 (13)
CONSUMPTION OF REFINED 2057.0 1 (17) 3 (1)
CRUDE STOCKS & OTHER 82.8 1 (4)
BLISTER STOCKS & OTHER 175.7 1 (10)
REFINED STOCKS & OTHER 278.8 1 (16)
SMELTED FROM SCRAP 49.5 1 (6) 2 (7)
REFINED FROM SCRAP 470.5 1 (12) 2 (8)
COPPER CONSUMED 2968.7 3 (3)
SCRAP STOCKS & OTHER 14.0 2 (3)
OTHER THAN COPPER-BASE SCRAP 40.0 2 (5)
DOMESTIC SCRAP 1498.5 2 (1)
COPPER BASE SCRAP 1391.7 2 (4)
SCRAP RECOVERED 1431.7 2 (6)
CONSUMPTION OF SCRAP 911.7 2 (9) 3 (2)
NET SCRAP EXPORTS 120.8 2 (2)

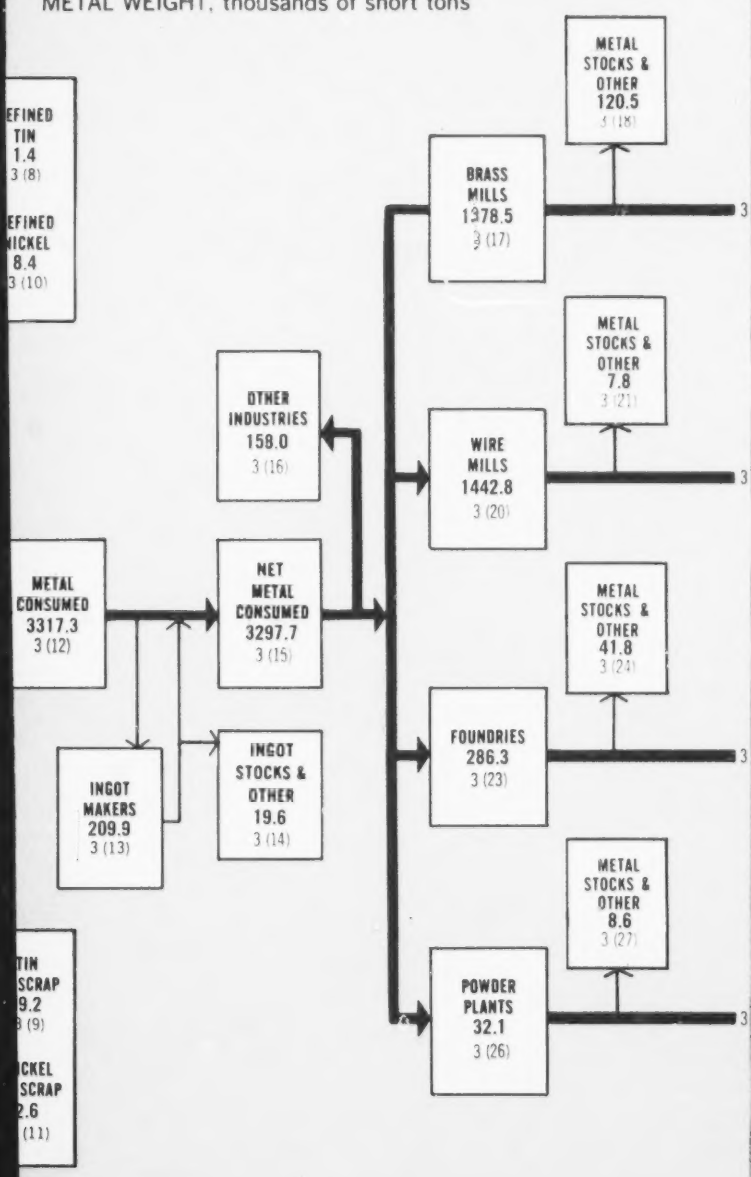
Supply of secondary copper from receipt to consumption by brass mills, foundries, powder plants, ingot makers, and other industries. (Table 2)

COPPER CONTENT, thousands of short tons

*1 (1) Refers to table and item in report where data for 1961 through 1980 appear

Consumption of metals by brass mills, wire mills, foundries, powder plants, ingot makers and other industries. (Table 3)

METAL WEIGHT, thousands of short tons


EFINED TIN 1.4 3 (8)
EFINED NICKEL 8.4 3 (10)
TIN SCRAP 9.2 3 (9)
NICKEL SCRAP 2.6 (11)
METAL CONSUMED 3317.3 3 (12)
INGOT MAKERS 209.9 3 (13)
INGOT STOCKS & OTHER 19.6 3 (14)
NET METAL CONSUMED 3297.7 3 (15)
OTHER INDUSTRIES 158.0 3 (16)
BRASS MILLS 1378.5 3 (17)
WIRE MILLS 1442.8 3 (20)
FOUNDRIES 286.3 3 (23)
POWDER PLANTS 32.1 3 (26)
METAL STOCKS & OTHER 120.5 3 (18)
METAL STOCKS & OTHER 7.8 3 (21)
METAL STOCKS & OTHER 41.8 3 (24)
METAL STOCKS & OTHER 8.6 3 (27)
3 (19)
3 (22)
3 (25)
3 (28)

Supply of mill, foundry, and powder products and their consumption in the end-use markets. (Table 4)

METAL WEIGHT, millions of pounds

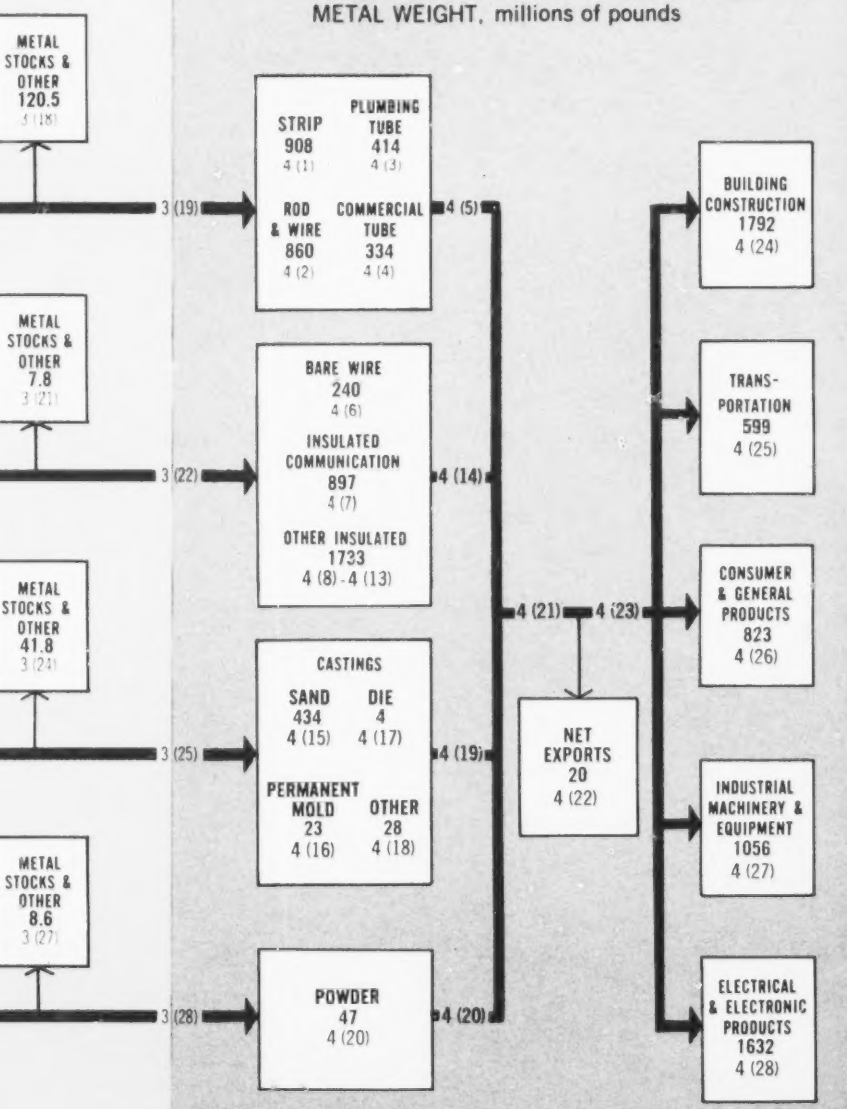

STRIP 908 4 (1)
PLUMBING TUBE 414 4 (3)
ROD & WIRE 860 4 (2)
COMMERCIAL TUBE 334 4 (4)
BARE WIRE 240 4 (6)
INSULATED COMMUNICATION 897 4 (7)
OTHER INSULATED 1733 4 (8) - 4 (13)
CASTINGS
SAND 434 4 (15)
DIE 4 4 (17)
PERMANENT MOLD 23 4 (16)
OTHER 28 4 (18)
POWDER 47 4 (20)
4 (5)
4 (14)
4 (19)
4 (20)
4 (21)
4 (23)
NET EXPORTS 20 4 (22)
BUILDING CONSTRUCTION 1792 4 (24)
TRANS-PORTATION 599 4 (25)
CONSUMER & GENERAL PRODUCTS 823 4 (26)
INDUSTRIAL MACHINERY & EQUIPMENT 1056 4 (27)
ELECTRICAL & ELECTRONIC PRODUCTS 1632 4 (28)

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Table 1

The supply of primary copper in the United States from mine to consumption by brass mills, wire mills, foundries, powder plants, ingot makers, and other industries – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
(1) Mine Production (page 8)	1,165.2	1,228.4	1,213.2	1,246.8	1,351.7	1,429.2	954.1
(2) Net Ore Imports (page 10)	47.0	43.3	48.3	51.5	26.3	40.5	−5.7
(3) Total Crude Primary	1,212.2	1,271.7	1,261.5	1,298.3	1,378.0	1,469.7	948.4
(4) Crude Stocks and Other	−4.9	−17.1	−3.6	−1.2	−11.1	−80.0	−86.1
(5) Smelter Production From Primary	1,207.3	1,254.6	1,257.9	1,297.1	1,366.9	1,389.7	862.3
(6) Smelter Production From Scrap	78.4	86.9	98.0	88.4	93.9	114.6	70.7
(7) Total Smelter Production (page 12)	1,285.7	1,341.5	1,355.9	1,385.5	1,460.8	1,504.3	933.0
(8) Net Imports of Blister (page 10)	335.1	330.1	367.8	384.8	327.7	349.2	248.3
(9) Total Blister	1,620.8	1,671.6	1,723.7	1,770.3	1,788.5	1,853.5	1,181.3
(10) Blister Stocks and Other (page 12)	7.8	27.1	−29.4	−25.6	17.2	−27.9	22.4
(11) Refined Production from Blister	1,628.6	1,698.7	1,694.3	1,744.7	1,805.7	1,825.6	1,203.7
(12) Refined Production from Scrap	185.3	185.8	190.1	245.7	335.1	357.7	322.9
(13) Total Refined Production (page 14)	1,813.9	1,884.5	1,884.4	1,990.4	2,140.8	2,183.3	1,526.6
(14) Imports of Refined	66.9	98.8	119.2	138.0	137.4	162.6	330.3
(15) Exports of Refined	−436.0	−337.5	−312.6	−317.0	−330.9	−279.6	−161.6
(16) Refined Stocks and Other (page 12)	41.2	−37.7	61.7	51.2	85.7	310.0	288.3
(17) Consumption of Refined (page 14)	1,486.0	1,608.1	1,752.7	1,862.6	2,033.0	2,376.3	1,983.6

COPPER CONTENT, thousands of short tons

1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
1,204.6	1,544.6	1,719.7	1,522.2	1,664.8	1,717.9	1,597.0	1,413.4	1,605.6	1,504.0	1,496.5	1,591.2	1,295.5
−37.4	37.9	−27.7	23.1	35.4	19.4	36.7	65.7	74.8	42.2	13.9	−23.9	−101.2
1,167.2	1,582.5	1,692.0	1,545.3	1,700.2	1,737.3	1,633.7	1,479.1	1,680.4	1,546.2	1,510.4	1,567.3	1,194.3
99.3	3.0	−50.7	−45.3	−9.8	6.7	−63.8	−32.0	−145.7	−111.0	−90.2	−95.0	−82.8
1,266.5	1,585.5	1,641.3	1,500.0	1,690.4	1,744.0	1,569.9	1,447.1	1,534.7	1,435.2	1,420.2	1,472.3	1,111.5
84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4	49.5
1,351.3	1,662.8	1,720.2	1,566.3	1,759.4	1,821.8	1,649.4	1,496.5	1,585.7	1,484.6	1,480.0	1,538.7	1,161.0
255.0	233.6	216.6	128.0	148.9	146.6	205.1	87.4	41.1	28.3	70.0	66.9	47.5
1,606.3	1,896.4	1,936.8	1,694.3	1,908.3	1,968.4	1,854.5	1,583.9	1,626.8	1,512.9	1,550.0	1,605.6	1,208.5
−84.1	−76.3	−92.8	−36.2	33.9	−22.1	−120.3	−91.1	−36.5	32.7	107.1	131.2	175.7
1,522.2	1,820.1	1,844.0	1,658.1	1,942.2	1,946.3	1,734.2	1,492.8	1,590.3	1,545.6	1,657.1	1,736.8	1,384.2
316.8	394.8	398.7	304.3	316.3	366.3	404.4	282.1	300.2	303.0	362.3	441.2	470.5
1,839.0	2,214.9	2,242.7	1,962.4	2,258.5	2,312.6	2,138.6	1,774.9	1,890.5	1,848.6	2,019.4	2,178.0	1,854.7
400.3	131.2	132.1	164.0	192.4	199.9	303.9	146.0	380.7	390.8	455.8	237.2	505.0
−251.0	−215.0	−222.0	−187.7	−182.7	−191.1	−126.7	−172.4	−114.6	−63.0	−113.1	−90.0	−23.9
−109.9	19.1	−102.3	82.3	−30.6	126.9	−116.8	−209.1	−163.7	12.7	55.4	61.2	−278.8
1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,199.0	1,539.4	1,992.9	2,189.1	2,417.5	2,386.4	2,057.0

Sources: U.S. Department of the Interior, Bureau of Mines;
U.S. Department of Commerce, Bureau of Industrial Economics
(a) Preliminary.

Table 1, Item 1.

Mine production of recoverable copper in the United States – 1961-1980

	1961	1962	1963	1964	1965	1966	1967	1968	1969
Arizona	587,053	644,242	660,977	690,988	703,377	739,569	501,741	627,961	801,363
California	1,382	1,162	916	1,035	1,165	1,078	788	1,182	1,129
Colorado	4,141	4,534	4,169	4,653	3,828	4,237	3,993	3,451	3,598
Idaho	4,328	3,861	4,172	4,666	5,140	4,961	4,210	3,525	3,332
Michigan	70,245	74,099	75,262	69,040	71,749	73,449	58,458	74,805	75,226
Missouri	1,479	2,752	1,816	2,059	2,331	3,913	3,215	5,494	12,664
Montana	104,000	94,021	79,762	103,806	115,489	128,061	65,483	69,480	103,314
Nevada	78,022	82,602	81,738	67,272	71,332	78,720	50,771	77,213	104,924
New Mexico	79,606	82,683	83,037	86,104	98,658	108,614	75,068	90,769	119,956
Pennsylvania	8,934	6,108	4,434	3,614	4,354	3,178	4,401	4,850	3,382
Tennessee	12,272	14,298	13,717	13,889	14,823	15,410	14,600	14,196	15,353
Utah	213,534	218,018	203,095	199,588	259,138	265,383	168,609	228,245	296,699
Washington	66	41	70[c]	35	30	34	21	22	18
Other States	93	–	1	31	320	2,545	2,766	3,428	3,621
Total	1,165,155	1,228,421	1,213,166	1,246,780	1,351,734	1,429,152	954,064	1,204,621	1,544,579

Mine production of recoverable copper in the World

	COPPER CONTENT, thousands of short tons									
	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
Australia	195.4	204.8	242.8	277.0	241.4	240.9	244.3	244.8	256.6	255.7
Canada	721.5	793.3	908.2	905.4	808.9	805.7	837.1	726.9	709.7	782.7
Chile	780.8	790.1	810.6	994.4	913.0	1,108.0	1,164.3	1,141.4	1,169.1	1,187.2
Japan	133.4	123.6	100.6	90.5	93.7	89.9	89.7	79.4	65.1	58.3
Papua New Guinea	—	136.7	201.6	202.9	190.1	194.6	201.0	218.9	188.3	161.5
Peru	228.6	241.5	223.4	233.2	199.5	242.8	375.9	403.9	437.6	402.3
Philippine Republic	217.6	235.6	243.8	248.6	248.9	262.5	300.7	290.3	327.4	336.2
Poland	134.7	148.8	167.6	203.9	253.5	294.3	318.9	350.5	380.3	380.7
Russia (U.S.S.R.)	1,091.3	1,135.4	1,168.4	1,168.4	1,212.5	1,245.6	1,212.5	1,256.6	1,267.7	1,267.5
South African Republic	163.6	178.5	193.8	197.4	197.2	217.0	226.4	230.7	224.0	236.9
United States	1,522.2	1,664.8	1,717.9	1,597.0	1,413.4	1,605.6	1,504.0	1,496.5	1,591.2	1,295.5
Zaire	447.3	482.0	538.6	550.8	545.4	489.9	530.9	467.2	440.7	506.8
Zambia	718.0	791.1	778.9	769.4	746.2	781.4	723.1	708.8	648.5	656.8
Other Countries	746.4	832.7	973.1	1,013.8	1,033.0	1,081.8	1,070.7	1,062.8	1,043.6	1,063.8
Total	7,100.8	7,758.9	8,269.3	8,452.7	8,096.7	8,660.0	8,799.5	8,678.7	8,749.8	8,591.9

Sources: United States—U.S. Department of the Interior, Bureau of Mines
Other Countries—American Bureau of Metal Statistics Inc.;
World Bureau of Metal Statistics
(a) Preliminary

COPPER CONTENT, short tons										
1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
917,918	820,171	908,612	927,271	858,783	813,211	1,024,421	923,778	982,606	1,042,787	845,580
2,308	515	598	369	194	344	375	221	(b)	(b)	(b)
3,749	3,938	3,944	3,123	3,012	3,560	2,431	1,896	1,313	399	457
3,612	3,776	2,942	3,625	2,841	3,192	3,362	4,052	4,286	3,988	2,996
67,543	56,005	67,260	72,221	67,012	73,690	43,707	42,375	38,380	(b)	(b)
12,134	8,445	11,509	10,273	12,665	14,258	11,050	11,737	11,925	14,353	15,429
120,412	88,581	123,110	132,466	131,131	87,959	91,111	86,203	74,214	77,001	41,799
106,688	96,928	101,119	93,702	84,101	81,210	58,160	67,061	22,546	(b)	(b)
166,278	157,419	168,034	204,742	196,585	146,263	172,360	164,698	140,906	181,089	164,857
2,539	3,349	2,611	1,845	—	—	—	—	—	—	—
15,535	13,916	11,310	8,500	6,304	10,041	11,131	6,187	12,444	(b)	(b)
295,738	263,451	259,507	256,589	230,593	177,155	185,458	194,130	205,393	212,836	174,821
(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)	(b)
5,203	5,689	4,284	3,214	3,781	2,483	2,020	1,628	2,469	58,793	49,584
1,719,657	1,522,183	1,664,840	1,717,940	1,597,002	1,413,366	1,605,586	1,503,966	1,496,482	1,591,246	1,295,523

Source: U. S. Department of the Interior, Bureau of Mines.

(a) Preliminary.

(b) Included in other States

(c) Includes North Carolina to avoid disclosing operation of individual companies.

Table 1, Item 2.

Imports and exports of copper ore in the United States – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Net Ore Imports (Ore, Concentrate, Matte)	47,040	43,251	48,322	51,469	26,257	40,528	−5,740
Imports (Ore, Concentrate, Matte)	47,394	43,552	48,408	52,038	36,933	41,942	32,971
Exports (Ore, Concentrate, Matte)	354	301	86	569	10,676	1,414	38,711

Table 1, Item 8.

Imports and exports of blister copper in the United States – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Net Imports of Blister	335,088	330,069	367,861	384,751	327,724	349,181	248,341
Imports of Blister	339,212	331,684	368,985	389,577	332,558	349,917	269,322
Exports of Blister	4,124	1,615	1,124	4,826	4,834	736	20,981

COPPER CONTENT, short tons												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
−37,431	37,871	−27,697	23,100	35,446	19,373	36,725	65,666	74,772	42,157	13,875	−23,930	−101,206
27,559	39,048	33,841	31,288	55,020	42,881	56,045	73,971	89,624	57,977	33,149	25,194	16,548
64,990	1,177	61,538	8,188	19,574	23,508	19,320	8,305	14,852	15,820	19,274	49,124	117,754

Source: U. S. Department of Commerce, Bureau of the Census

(a) Preliminary

COPPER CONTENT, short tons												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
254,969	233,609	216,611	128,042	148,861	146,625	205,098	87,405	41,100	28,298	69,962	66,869	47,547
270,718	237,949	224,416	156,744	157,430	154,104	207,761	88,951	43,828	44,698	81,407	75,107	51,780
15,749	4,340	7,805	28,702	8,569	7,479	2,663	1,546	2,728	16,400	11,445	8,238	4,233

Source: U. S. Department of Commerce, Bureau of the Census

(a) Preliminary

Table 1, Item 7.

Smelter production of copper in the United States – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Total Smelter Production of Copper	1,285.7	1,341.5	1,355.9	1,385.5	1,460.8	1,504.3	933.0
from Domestic Ore[(b)] (Table 1, Item 5)	1,162.4	1,214.1	1,219.3	1,259.8	1,335.7	1,353.1	841.3
from Foreign Ore (Table 1, Item 5)	44.9	40.5	38.6	37.3	31.2	36.6	21.0
from Scrap (Table 1, Item 6)	78.4	86.9	98.0	88.4	93.9	114.6	70.7

Table 1, Item 10.

Blister stocks and other – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
End of Year	236.0	246.0	252.0	246.0	246.0	270.0	220.0
Net Change	−25.0	10.0	6.0	−6.0	–	24.0	−50.0
Apparent Change	−7.8	−27.1	29.4	25.6	−17.2	27.9	−22.4

Table 1, Item 16.

Refined stocks and other – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Refineries	71.2	113.4	75.2	42.5	50.4	61.6	41.7
Wire Mills	54.0	61.0	39.0	49.0	53.0	80.0	47.0
Brass Mills	45.0	39.0	39.0	56.0	55.0	84.0	51.0
Other Processors	4.0	4.0	5.0	5.0	5.0	10.0	5.0
Government	1,066.0	1,058.6	1,047.2	1,019.9	897.4	452.4	275.2
Commodity Exchange	8.6	4.0	1.7	3.1	10.4	4.1	13.7
End of Year Total	1,248.8	1,280.0	1,207.1	1,175.5	1,071.2	692.1	433.6
Net Change	−62.5	31.2	−72.9	−31.6	−104.3	−379.1	−258.5
Apparent Change	−41.2	37.7	−61.7	−51.2	−85.7	−310.0	−288.3

COPPER CONTENT, thousands of short tons

1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
1,351.3	1,662.8	1,720.2	1,566.3	1,759.4	1,821.8	1,649.4	1,496.5	1,585.7	1,484.6	1,480.0	1,538.7	1,161.0
1,234.7	1,547.5	1,605.2	1,470.8	1,649.1	1,705.1	1,532.1	1,374.3	1,461.3	1,394.4	1,399.9	1,447.6	1,096.2
31.8	38.0	36.1	29.2	41.3	38.9	37.8	72.8	73.4	40.8	20.3	24.7	15.3
84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4	49.5

Sources: U. S. Department of the Interior, Bureau of Mines; CDA

(a) Preliminary.

(b) For the years 1962 through 1966, CDA used figures for refined production from domestic ores instead of smelter production from domestic ores.

COPPER CONTENT, thousands of short tons

1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
272.0	291.0	340.0	303.0	282.0	265.0	324.0	312.0	321.0	346.0	290.0	303.1	299.8
52.0	19.0	49.0	−37.0	−21.0	−17.0	59.0	−12.0	9.0	25.0	−56.0	13.1	−3.3
84.1	76.3	92.8	36.2	−33.9	22.1	120.3	91.1	36.5	−32.7	−107.1	−131.2	−175.7

Sources: U. S. Department of the Interior, Bureau of Mines; CDA.

(a) Preliminary.

COPPER CONTENT, thousands of short tons

1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
44.9	41.9	142.7	82.7	99.6	43.2	151.6	260.7	272.8	286.7	188.3	78.4	73.4
54.0	63.0	134.0	120.0	75.0	61.0	131.0	140.0	133.0	136.0	85.0	68.0	81.0
57.0	56.0	49.0	50.0	35.0	43.0	42.0	33.0	39.0	37.0	31.0	31.0	27.0
4.0	6.0	4.0	4.0	4.0	4.0	6.0	4.0	5.0	5.0	4.0	4.0	4.0
261.4	253.4	253.4	251.6	226.6	217.8	35.3	26.2	42.1	22.6	22.5	22.3	22.3
11.7	4.0	17.9	20.3	57.8	5.9	43.3	100.0	201.0	184.4	179.6	98.9	179.8
433.0	424.3	601.0	528.6	498.0	374.9	409.2	563.9	692.9	671.7	510.4	302.6	387.5
−0.6	−8.7	176.7	−72.4	−30.6	−123.1	34.3	154.7	129.0	−21.2	−161.3	−207.8	84.9
109.9	−19.1	102.3	−82.3	30.6	−126.9	116.8	209.1	163.7	−12.7	−55.4	−61.2	278.8

U.S. Department of Commerce, Bureau of Industrial Economics
(a) Preliminary.

Table 1, Item 13.

Production of refined copper in the United States – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Total Production of Refined Copper	1,813.9	1,884.5	1,884.4	1,990.4	2,140.8	2,183.3	1,526.6
From Primary Sources (Table 1, Items 1, 2, 4, 8, 10)	1,550.2	1,611.8	1,596.3	1,656.3	1,711.8	1711.0	1,133.0
From Scrap at Smelters (Table 1, Item 6)	78.4	86.9	98.0	88.4	93.9	114.6	70.7
From Scrap at Refiners (Table 1, Item 12)	185.3	185.8	190.1	245.7	335.1	357.7	322.9

Table 1, Item 17.

Consumption of refined copper in the United States – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Total	1,486.0	1,608.1	1,752.7	1,862.6	2,033.0	2,376.3	1,983.6
Brass Mills	613.7	633.2	689.4	711.1	766.2	939.7	658.9
Wire Mills	835.0	935.0	1,027.0	1,111.0	1,228.0	1,376.0	1,274.0
Foundries	15.5	18.7	15.7	19.2	16.0	21.4	22.2
Powder Plants	7.2	7.4	8.1	7.8	9.4	13.1	6.5
Ingot Makers	3.3	3.3	3.3	3.5	4.4	17.7	8.6
Other Industries [b]	11.3	10.5	9.2	10.0	9.0	8.4	13.4

COPPER CONTENT, thousands of short tons

1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
1,839.0	2,214.9	2,242.7	1,962.4	2,258.5	2,312.6	2,138.6	1,774.9	1,890.5	1,848.6	2,019.4	2,178.0	1,854.7
1,437.4	1,742.8	1,765.1	1,591.8	1,873.2	1,868.5	1,654.7	1,443.4	1,539.3	1,496.2	1,597.3	1,670.4	1,334.7
84.8	77.3	78.9	66.3	69.0	77.8	79.5	49.4	51.0	49.4	59.8	66.4	49.5
316.8	394.8	398.7	304.3	316.3	366.3	404.4	282.1	300.2	303.0	362.3	441.2	470.5

Sources: U. S. Department of the Interior, Bureau of Mines
U. S. Department of Commerce, Bureau of the Census
(a) Preliminary

COPPER CONTENT, thousands of short tons

1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,199.0	1,539.4	1,992.9	2,189.1	2,417.5	2,386.4	2,057.0
653.6	799.1	660.6	655.8	667.2	714.4	670.2	439.0	584.8	628.6	682.6	672.6	564.0
1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,653.0	1,442.8
14.9	23.8	23.7	17.5	17.9	30.6	28.7	21.7	21.0	22.5	22.1	24.0	18.5
7.7	9.8	6.5	7.2	9.5	12.7	12.0	6.8	11.8	11.3	11.5	11.9	10.0
5.7	6.7	6.8	4.5	6.0	6.1	4.7	1.6	2.9	2.5	4.0	3.2	2.7
10.5	15.8	14.2	11.1	10.7	12.2	9.1	9.0	8.4	13.0	24.6	21.7	19.0

Sources: U. S. Department of the Interior, Bureau of Mines; CDA
(a) Preliminary.
(b) Chemical, Steel, Aluminum, and Other Industries.

Table 2

The supply of secondary copper in the United States from receipt to consumption by brass mills, foundries, powder plants, ingot makers, and other industries – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
(1) Receipts of Domestic Scrap	1,031.5	1,063.7	1,123.5	1,309.4	1,438.4	1,468.5	1,309.3
(2) Net Exports of Scrap (page 18)	−111.4	−31.1	−35.0	−88.7	−62.6	−18.1	−45.1
(3) Scrap Stocks and Other (page 18)	17.0	−20.0	−1.0	11.0	−2.0	−5.0	−18.0
(4) Recovery From Copper Scrap (page 20)	937.1	1,012.6	1,087.5	1,231.7	1,373.8	1,445.4	1,246.2
(5) Recovery From Other Scrap (page 20)	10.6	13.1	13.6	14.4	16.2	16.9	16.4
(6) Total Scrap Recovery (page 20)	947.7	1,025.7	1,101.1	1,246.1	1,390.0	1,462.3	1,262.6
(7) Smelter Production From Scrap	−78.4	−86.9	−98.0	−88.4	−93.9	−114.6	−70.7
(8) Refined Production From Scrap	−185.3	−185.8	−190.1	−245.7	−335.1	−357.7	−322.9
(9) Consumption of Scrap (page 20)	684.0	753.0	813.0	912.0	961.0	990.0	869.0

COPPER CONTENT, thousands of short tons												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
1,368.2	1,552.8	1,447.6	1,334.9	1,440.8	1,560.9	1,504.3	1,113.0	1,273.8	1,325.7	1,435.4	1,651.6	1,498.5
−76.6	−46.9	−79.0	−50.7	−39.2	−81.4	−70.5	−84.3	−54.1	−58.5	−95.9	−100.7	−120.8
32.0	−15.0	−13.0	17.0	7.0	−2.0	−3.0	5.0	−19.0	−16.0	13.0	−2.0	14.0
1,323.6	1,490.9	1,355.6	1,301.2	1,408.6	1,477.5	1,430.8	1,033.7	1,200.7	1,251.2	1,352.5	1,548.9	1,391.7
16.0	19.0	16.8	17.0	19.7	21.1	21.1	28.1	35.7	37.9	39.8	42.5	40.0
1,339.6	1,509.9	1,372.4	1,318.2	1,428.3	1,498.6	1,451.9	1,061.8	1,236.4	1,289.1	1,392.3	1,591.4	1,431.7
−84.8	−77.3	−78.9	−66.3	−69.0	−77.8	−79.5	−49.4	−51.0	−49.4	−59.8	−66.4	−49.5
−316.8	−394.8	−398.7	−304.3	−316.3	−366.3	−404.4	−282.1	−300.2	−303.0	−362.3	−441.2	−470.5
938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	885.2	936.7	970.2	1,083.8	911.7

Sources: U.S. Department of Commerce, Bureau of Industrial Economics; CDA

(a) Preliminary.

Table 2, Item 2.

Imports and exports of copper and copper alloy scrap in the United States – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Net Exports	111.4	31.1	35.0	88.7	62.6	18.1	45.1
Imports	6.0	7.2	4.0	5.2	16.8	31.7	11.4
Exports	117.4	38.3	39.0	93.9	79.4	49.8	56.5

Table 2, Item 3.

Scrap stocks and other – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Secondary Smelters	20	20	21	22	21	23	26
Primary Producers	23	39	26	31	28	29	22
Brass Mills	34	36	47	30	39	44	61
Foundries	13	14	15	14	11	8	13
Other Processors	2	3	4	5	5	5	5
End of Year Total	92	112	113	102	104	109	127
Net and Apparent Change	−17	20	1	−11	2	5	18

COPPER CONTENT, thousands of short tons

1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
76.6	46.9	79.0	50.7	39.2	81.4	70.5	84.3	54.1	58.5	95.9	100.7	120.8
12.5	7.7	3.8	13.8	18.8	27.1	41.7	20.2	29.4	28.6	28.8	32.0	32.5
89.1	54.6	82.8	64.5	58.0	108.5	112.2	104.5	83.5	87.1	124.7	132.7	153.3

Source: U.S. Department of Commerce, Bureau of the Census

(a) Preliminary

COPPER CONTENT, thousands of short tons

1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
22	21	19	24	22	23	24	27	28	35	33	35	29
20	36	49	27	24	19	18	12	25	27	28	29	23
39	39	43	37	36	44	45	46	48	55	44	45	44
10	10	8	14	13	11	13	11	13	13	12	11	10
4	4	4	4	4	4	4	3	4	4	4	3	3
95	110	123	106	99	101	104	99	118	134	121	123	109
−32	15	13	−17	−7	2	3	−5	19	16	−13	2	−14

Sources: U.S. Department of Commerce, Bureau of Industrial Economics; CDA

(a) Preliminary.

Table 2, Item 6.

Recovery of copper from scrap — 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Recovery of Copper from Scrap							
New	471.2	540.1	589.7	675.3	775.7	828.4	683.9
Old	476.5	485.6	511.4	570.8	614.3	633.9	578.7
Total	947.7	1,025.7	1,101.1	1,246.1	1,390.0	1,462.3	1,262.6
Recovery of Copper from Copper-Base Scrap (Table 2, Item 4)							
New	465.3	532.2	581.5	666.1	765.9	818.3	673.7
Old	471.8	480.4	506.0	565.6	607.9	627.1	572.5
Total	937.1	1,012.6	1,087.5	1,231.7	1,373.8	1,445.4	1,246.2
Recovery of Copper from Scrap Other than Copper-Base Scrap (Table 2, Item 5)							
New	5.9	7.9	8.2	9.2	9.8	10.1	10.2
Old	4.7	5.2	5.4	5.2	6.4	6.8	6.2
Total	10.6	13.1	13.6	14.4	16.2	16.9	16.4

Table 2, Item 9.

Consumption of copper scrap in the United States — 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Total	684.0	753.0	813.0	912.0	961.0	990.0	869.0
Brass Mills	294.7	345.6	374.3	438.5	465.9	485.7	406.9
Foundries	112.6	121.4	138.6	145.5	148.9	144.0	133.6
Powder Plants	10.3	12.3	12.6	16.1	15.9	15.3	16.1
Ingot Makers	227.0	233.3	248.2	266.8	283.4	293.0	271.9
Other Industries[(b)]	39.4	40.4	39.3	45.1	46.9	52.0	40.5

COPPER CONTENT, thousands of short tons												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
730.6	817.8	745.7	763.2	867.4	916.2	878.2	611.0	737.4	753.7	812.9	971.1	833.7
609.0	692.1	626.7	555.0	560.9	582.4	573.7	450.8	499.0	535.4	579.4	620.3	598.0
1,339.6	1,509.9	1,372.4	1,318.2	1,428.3	1,498.6	1,451.9	1,061.8	1,236.4	1,289.1	1,392.3	1,591.4	1,431.7
719.9	804.9	734.2	752.5	854.4	901.9	864.2	593.6	716.7	731.8	790.0	946.6	810.7
603.7	686.0	621.4	548.7	554.2	575.6	566.6	440.1	484.0	519.4	562.5	602.3	581.0
1,323.6	1,490.9	1,355.6	1,301.2	1,408.6	1,477.5	1,430.8	1,033.7	1,200.7	1,251.2	1,352.5	1,548.9	1,391.7
10.7	12.9	11.5	10.7	13.0	14.3	14.0	17.4	20.7	21.9	22.9	24.5	23.0
5.3	6.1	5.3	6.3	6.7	6.8	7.1	10.7	15.0	16.0	16.9	18.0	17.0
16.0	19.0	16.8	17.0	19.7	21.1	21.1	28.1	35.7	37.9	39.8	42.5	40.0

Sources: U. S. Department of the Interior, Bureau of Mines, CDA

(a) Preliminary

COPPER CONTENT, thousands of short tons												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	885.2	936.7	970.2	1,083.8	911.7
475.9	516.6	446.5	496.6	578.4	612.5	563.0	406.3	519.3	531.9	541.7	608.1	531.9
126.6	147.4	129.7	113.4	121.7	122.7	115.4	90.9	95.7	101.2	105.2	109.0	97.8
18.1	16.5	12.2	16.5	16.0	17.3	17.7	11.6	16.8	18.3	18.5	20.6	17.0
278.8	290.3	241.4	257.9	250.5	236.7	215.0	164.0	175.7	197.2	204.1	238.2	171.0
38.6	67.0	65.0	63.2	76.4	65.3	56.9	57.5	77.7	88.1	100.7	107.9	94.0

Sources: U.S. Department of Commerce, Bureau of Industrial Economics; CDA

(a) Preliminary

(b) Chemical, Steel, Aluminum and Other Industries.

Table 3

Consumption of metals in the United States by ingot makers, brass mills, wire mills, foundries, powder plants, and other industries — 1961-1980

	1961	1962	1963	1964	1965	1966	1967
(1) Consumption of Refined Copper (page 14)	1,486.0	1,608.1	1,752.7	1,862.6	2,033.0	2,376.3	1,983.6
(2) Consumption of Scrap Copper (page 20)	684.0	753.0	813.0	912.0	961.0	990.0	869.0
(3) Total Copper Consumed (page 24)	2,170.0	2,361.1	2,565.7	2,774.6	2,994.0	3,366.3	2,852.6
(4) Consumption of Zinc-Slab (page 26)	128.6	129.8	128.3	135.1	126.9	185.6	130.3
(5) Consumption of Zinc in Scrap (page 26)	102.7	117.6	123.9	138.6	165.6	170.4	144.4
(6) Consumption of Lead – Refined (page 26)	2.9	3.1	3.0	3.0	3.5	3.9	2.3
(7) Consumption of Lead in Scrap (page 26)	27.6	27.7	31.5	33.8	34.4	35.6	28.6
(8) Consumption of Tin – Refined (page 26)	1.8	2.2	2.7	1.7	2.6	3.1	2.6
(9) Consumption of Tin in Scrap (page 26)	16.3	16.3	17.2	18.5	18.7	20.0	17.1
(10) Consumption of Nickel – Refined (page 26)	3.8	4.0	4.4	5.4	9.3	5.2	3.6
(11) Consumption of Nickel in Scrap (page 26)	2.1	1.9	2.4	3.0	4.0	7.4	7.2
(12) Total Metal Consumed	2,455.8	2,663.7	2,879.1	3,113.7	3,359.0	3,797.5	3,188.7
(13) Converted to Ingot[b]	265.0	276.5	290.5	312.1	333.5	351.6	311.9
(14) Ingot Stocks and Other	−29.0	−34.1	−30.7	−38.3	−34.7	−55.1	−31.6
(15) Net Metal Consumed (page 28)	2,426.8	2,629.6	2,848.4	3,075.4	3,324.3	3,742.4	3,157.1
(16) Other Industries[c] (page 28)	78.5	66.4	77.5	79.6	83.0	103.5	116.8
(17) Brass Mills – Net Metal Consumed (page 28)	1,109.0	1,197.2	1,298.7	1,395.5	1,502.2	1,753.9	1,312.8
(18) – Metal Stocks and Other	−76.5	−19.2	−56.7	−2.5	−13.7	−91.4	−14.8
(19) – Metal Contained in Products Supplied	1,032.5	1,178.0	1,232.0	1,393.0	1,488.5	1,662.5	1,298.0
(20) Wire Mills – Net Metal Consumed (page 28)	835.0	935.0	1,027.0	1,111.0	1,228.0	1,376.0	1,274.0
(21) – Metal Stocks and Other	−58.5	−117.0	−170.5	−115.5	−139.5	−129.0	−96.0
(22) – Metal Contained in Products Supplied	776.5	818.0	856.5	995.5	1,088.5	1,247.0	1,178.0
(23) Foundries – Net Metal Consumed (page 28)	380.5	403.8	425.3	457.6	476.9	470.3	419.4
(24) – Metal Stocks and Other	−13.5	−.8	.7	−12.1	−32.4	−15.3	−19.9
(25) – Metal Contained in Products Supplied	367.0	403.0	426.0	445.5	444.5	455.0	399.5
(26) Powder Plants – Net Metal Consumed (page 28)	23.8	27.2	29.9	31.7	34.2	38.7	34.1
(27) – Metal Stocks and Other	−3.3	−3.2	−4.4	−3.2	−3.2	−5.2	−6.1
(28) – Metal Contained in Products Supplied	20.5	24.0	25.5	28.5	31.0	33.5	28.0

COPPER CONTENT, thousands of short tons												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,199.0	1,539.4	1,992.9	2,189.1	2,417.5	2,386.4	2,057.0
938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	885.2	936.7	970.2	1,083.8	911.7
2,816.4	3,188.0	2,945.3	2,968.6	3,280.6	3,502.8	3,167.0	2,269.7	2,878.1	3,125.8	3,387.7	3,470.2	2,968.7
METAL WEIGHT, thousands of short tons												
162.0	179.5	127.7	150.4	192.0	197.6	181.5	115.3	166.2	168.9	176.0	180.1	160.5
165.1	196.8	160.4	165.9	195.0	183.4	165.7	119.4	156.9	159.9	171.8	177.8	144.0
2.8	3.7	2.5	3.1	3.8	4.9	4.1	2.0	3.5	3.3	3.7	3.9	2.7
28.9	30.0	24.9	22.5	22.3	23.9	24.0	17.7	22.5	26.7	26.4	26.1	19.8
2.8	2.8	2.2	2.2	2.0	2.3	2.1	1.2	1.8	1.7	1.9	1.9	1.4
16.5	16.6	13.7	13.0	20.6	14.0	14.1	10.5	12.6	15.0	14.5	13.8	9.2
3.4	5.9	5.1	6.1	6.5	5.4	7.1	7.5	5.5	4.6	4.8	7.6	8.4
3.2	4.2	5.2	5.4	4.7	11.8	4.9	4.5	4.2	3.5	2.6	3.5	2.6
3,201.1	3,627.5	3,287.0	3,337.2	3,727.5	3,946.1	3,570.5	2,547.8	3,251.3	3,509.4	3,789.4	3,884.9	3,317.3
321.3	326.2	256.0	268.2	279.9	284.5	261.6	188.2	228.7	257.6	262.6	265.7	209.9
−37.8	−43.6	−55.9	−56.6	−32.1	−10.9	−2.7	−21.8	−5.3	−12.3	−15.4	−37.6	−19.6
3,163.3	3,583.9	3,231.1	3,280.6	3,695.4	3,935.2	3,567.8	2,526.0	3,246.0	3,497.1	3,774.0	3,847.3	3,297.7
96.4	125.5	113.3	110.3	125.1	116.5	99.0	99.7	140.9	158.6	167.7	181.0	158.0
1,421.2	1,657.3	1,371.4	1,448.5	1,615.4	1,700.2	1,577.6	1,067.2	1,407.3	1,464.6	1,549.6	1,619.5	1,378.5
−43.2	−102.3	−114.9	−94.0	−107.4	−41.7	−163.1	−27.7	−103.8	−86.6	−95.1	−91.0	−120.5
1,378.0	1,555.0	1,256.5	1,354.5	1,508.0	1,658.5	1,414.5	1,039.5	1,303.5	1,378.0	1,454.5	1,528.5	1,258.0
1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,653.0	1,442.8
−79.5	−33.0	−127.2	−80.9	−176.3	−213.3	−151.8	−29.8	−165.5	−83.7	−175.2	−117.5	−7.8
1,106.5	1,262.0	1,211.5	1,244.0	1,350.0	1,459.0	1,322.5	1,031.5	1,198.5	1,427.5	1,497.5	1,535.5	1,435.0
422.6	468.1	378.0	364.6	394.0	404.9	380.3	276.0	299.4	326.2	346.2	353.6	286.3
−27.1	−41.6	−2.5	−12.1	−12.5	−14.9	−44.8	−16.0	−24.9	−36.2	−56.2	−45.1	−41.8
395.5	426.5	375.5	352.5	381.5	390.0	335.5	260.0	274.5	290.0	290.0	308.5	244.5
37.1	38.0	29.7	32.3	34.6	41.3	36.6	21.8	34.4	36.5	37.8	40.2	32.1
−6.1	−7.5	−6.2	−6.3	−7.6	−9.3	−2.1	+1.2	−1.9	−5.0	−5.3	−7.2	−8.6
31.0	30.5	23.5	26.0	27.0	32.0	34.5	23.0	32.5	31.5	32.5	33.0	23.5

Sources: U.S. Department of the Interior, Bureau of Mines; U.S. Department of Commerce, Bureau of Industrial Development; CDA

(a) Preliminary.

(b) Ingot Makers consume refined copper, scrap copper, and alloying metal and ship copper alloy ingots to brass mills, foundries, powder plants, and other industries.

(c) Chemical, Steel, Aluminum and Other Industries.

Table 3, Item 3.

Consumption of copper by ingot makers, brass mills, wire mills, foundries, powder plants and other industries — 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Copper Consumed							
Refined (Table 1, Item 17)	1,486.0	1,608.1	1,752.7	1,862.6	2,033.0	2,376.3	1,983.6
Scrap (Table 2, Item 9)	684.0	753.0	813.0	912.0	961.0	990.0	869.0
Total (Table 3, Item 3)	2,170.0	2,361.1	2,565.7	2,774.6	2,994.0	3,366.3	2,852.6
Ingot Makers[(b)]							
Refined	3.3	3.3	3.3	3.5	4.4	17.7	8.6
Scrap	227.0	233.3	248.2	266.8	283.4	293.0	271.9
Total	230.3	236.6	251.5	270.3	287.8	310.7	280.5
Brass Mills							
Refined	613.7	633.2	689.4	711.1	766.2	939.7	658.9
Scrap	294.7	345.6	374.3	438.5	465.9	485.7	406.9
Total	908.4	978.8	1,063.7	1,149.6	1,232.1	1,425.4	1,065.8
Wire Mills[(c)]							
Refined	835.0	935.0	1,027.0	1,111.0	1,228.0	1,376.0	1,274.0
Foundries							
Refined	15.5	18.7	15.7	19.2	16.0	21.4	22.2
Scrap	112.6	121.4	138.6	145.5	148.9	144.0	133.6
Total	128.1	140.1	154.3	164.7	164.9	165.4	155.8
Powder Plants							
Refined	7.2	7.4	8.1	7.8	9.4	13.1	6.5
Scrap	10.3	12.3	12.6	16.1	15.9	15.3	16.1
Total	17.5	19.7	20.7	23.9	25.3	28.4	22.6
Other Industries[(d)]							
Refined	11.3	10.5	9.2	10.0	9.0	8.4	13.4
Scrap	39.4	40.4	39.3	45.1	46.9	52.0	40.5
Total	50.7	50.9	48.5	55.1	55.9	60.4	53.9

COPPER CONTENT, thousands of short tons												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
1,878.4	2,150.2	2,050.5	2,021.0	2,237.6	2,448.3	2,199.0	1,539.4	1,992.9	2,189.1	2,417.5	2,386.4	2,057.0
938.0	1,037.8	894.8	947.6	1,043.0	1,054.5	968.0	730.3	885.2	936.7	970.2	1,083.8	911.7
2,816.4	3,188.0	2,945.3	2,968.6	3,280.6	3,502.8	3,167.0	2,269.7	2,878.1	3,125.8	3,387.7	3,470.2	2,968.7
5.7	6.7	6.8	4.5	6.0	6.1	4.7	1.6	2.9	2.5	4.0	3.2	2.7
278.8	290.3	241.4	257.9	250.5	236.7	215.0	164.0	175.7	197.2	204.1	238.2	171.0
284.5	297.0	248.2	262.4	256.5	242.8	219.7	165.6	178.6	199.7	208.1	241.4	173.7
653.6	799.1	660.5	655.8	667.2	714.4	670.2	439.0	584.8	628.6	682.6	672.6	564.0
475.9	516.6	446.5	496.6	578.4	612.5	563.0	406.3	519.3	531.9	541.7	608.1	531.9
1,129.5	1,315.7	1,107.1	1,152.4	1,245.6	1,326.9	1,233.2	845.3	1,104.1	1,160.5	1,224.3	1,280.7	1,095.9
1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,653.0	1,442.8
14.9	23.8	23.7	17.5	17.9	30.6	28.7	21.7	21.0	22.5	22.1	24.0	18.5
126.6	147.4	129.7	113.4	121.7	122.7	115.4	90.9	95.7	101.2	105.2	109.0	97.8
141.5	171.2	153.4	130.9	139.6	153.3	144.1	112.6	116.7	123.7	127.3	133.0	116.3
7.7	9.8	6.5	7.2	9.5	12.7	12.0	6.8	11.8	11.3	11.5	11.9	10.0
18.1	16.5	12.2	16.5	16.0	17.3	17.7	11.6	16.8	18.3	18.5	20.6	17.0
25.8	26.3	18.7	23.7	25.5	30.0	29.7	18.4	28.6	29.6	30.0	32.5	27.0
10.5	15.8	14.2	11.1	10.7	12.2	9.1	9.0	8.4	13.0	24.6	21.7	19.0
38.6	67.0	65.0	63.2	76.4	65.3	56.9	57.5	77.7	88.1	100.7	107.9	94.0
49.1	82.8	79.2	74.3	87.1	77.5	66.0	66.5	86.1	101.1	125.3	129.6	113.0

Sources: U.S. Department of the Interior, Bureau of Mines; U.S. Department of Commerce, Bureau of Industrial Development; CDA

(a) Preliminary.

(b) Ingot Makers consume refined copper, scrap copper, and alloying metal and ship copper alloy ingots to brass mills, foundries, powder plants, and other industries.

(c) Wire Mills consume refined copper only.

(d) Chemical, Steel, Aluminum and Other Industries.

Table 3, Items 4 to 11.

Consumption of alloying metal by ingot makers, brass mills, foundries and powder plants – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Ingot Makers[(b)]							
Consumption of Zinc – Slab	12.9	10.9	7.8	8.6	7.4	9.4	8.1
Zinc in Scrap	24.9	26.9	29.2	31.3	33.0	35.2	31.3
Lead in Scrap	17.2	17.9	19.4	20.7	21.3	23.6	20.1
Tin in Scrap	13.2	13.8	14.3	15.3	15.7	17.2	14.6
Nickel in Scrap	.5	.3	.6	.6	.7	1.0	.9
Total	68.7	69.8	71.3	76.5	78.1	86.4	75.0
Brass Mills							
Consumption of Zinc – Slab	111.2	113.7	115.8	122.3	114.4	169.3	116.9
Zinc in Scrap	71.7	84.4	88.2	100.3	126.4	129.9	108.9
Lead – Refined	2.9	3.1	3.0	3.0	3.5	3.9	2.3
Lead in Scrap	2.9	3.6	4.1	4.6	5.2	5.3	2.9
Tin – Refined	.9	.9	.9	1.0	1.2	1.5	1.2
Tin in Scrap	.1	.1	.2	.3	.3	.4	.5
Nickel – Refined	3.8	4.0	4.4	5.4	9.3	5.2	3.6
Nickel in Scrap	1.6	1.6	1.8	2.4	3.3	6.4	6.3
Total	195.1	211.4	218.4	239.3	263.6	321.9	242.6
Foundries							
Consumption of Zinc – Slab	4.1	4.9	4.0	3.3	3.1	3.4	2.3
Zinc in Scrap	3.8	3.7	4.0	4.6	4.3	4.4	3.4
Lead in Scrap	7.5	6.2	8.0	8.5	7.9	6.7	5.6
Tin in Scrap	3.0	2.4	2.7	2.9	2.7	2.4	2.0
Total	18.4	17.2	18.7	19.3	18.0	16.9	13.3
Powder Plants							
Consumption of Zinc – Slab	.4	.3	.7	.9	2.0	3.5	3.0
Zinc in Scrap	2.3	2.6	2.5	2.4	1.9	.9	.8
Tin – Refined	.9	1.3	1.8	.7	1.4	1.6	1.4
Total	3.6	4.2	5.0	4.0	5.3	6.0	5.2
Total Alloys	285.8	302.6	313.4	339.1	365.0	431.2	336.1

ALLOY CONTENT, thousands of short tons												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
12.2	13.6	9.9	10.4	7.1	6.9	8.2	6.6	7.7	8.3	7.3	7.5	19.0
32.8	34.5	26.7	31.2	33.9	29.4	28.2	20.8	26.8	29.1	25.0	24.2	16.2
19.9	20.1	16.1	16.8	16.2	18.0	18.1	13.4	16.9	19.7	19.2	18.6	13.7
14.1	14.1	11.2	11.5	19.1	12.5	12.5	9.3	11.4	13.3	12.4	11.7	7.6
.8	.9	.6	.7	.6	1.3	.7	.4	.4	.4	.4	.4	.4
79.8	83.2	64.5	70.6	76.9	68.1	67.7	50.5	63.2	70.8	64.3	62.4	56.9
145.9	158.7	112.2	134.8	177.4	183.6	167.6	104.8	153.1	154.5	162.2	167.0	138.0
126.7	156.6	128.8	129.8	156.2	149.2	132.6	94.7	124.5	125.5	139.8	147.3	122.9
2.8	3.7	2.5	3.1	3.8	4.9	4.1	2.0	3.5	3.3	3.7	3.9	2.7
3.6	4.7	3.2	2.9	3.6	3.6	3.3	2.3	3.4	4.5	3.8	4.0	3.3
1.2	1.5	1.2	1.1	1.0	1.1	1.1	.6	.8	.7	.8	.9	.8
.5	.7	.5	.4	.5	.5	.5	.3	.3	.6	.5	.5	.3
3.4	5.9	5.1	6.1	6.5	5.4	7.1	7.5	5.5	4.6	4.8	7.6	8.4
2.4	3.3	4.6	4.7	4.1	10.5	4.2	4.1	3.8	3.1	2.2	3.1	2.2
286.5	335.1	258.1	282.9	353.1	358.8	320.5	216.3	294.9	296.8	317.8	334.3	278.6
2.3	6.0	4.6	4.5	6.8	6.0	4.4	3.1	4.2	4.5	4.9	4.0	2.8
3.4	3.4	3.2	2.7	2.8	2.7	3.5	3.0	4.1	4.2	5.6	5.2	4.1
5.4	5.2	5.6	2.8	2.5	2.3	2.6	2.0	2.2	2.5	3.4	3.5	2.8
1.9	1.8	2.0	1.1	1.0	1.0	1.1	.9	.9	1.1	1.6	1.6	1.3
13.0	16.4	15.4	11.1	13.1	12.0	11.6	9.0	11.4	12.3	15.5	14.3	11.0
1.6	1.2	1.0	.7	.7	1.1	1.3	.8	1.2	1.6	1.6	1.6	.7
2.2	2.3	1.7	2.2	2.1	2.1	1.4	.9	1.5	1.1	1.4	1.1	.8
1.6	1.3	1.0	1.1	1.0	1.2	1.0	.6	1.0	1.0	1.1	1.0	.6
5.4	4.8	3.7	4.0	3.8	4.4	3.7	2.3	3.7	3.7	4.1	3.7	2.1
384.7	439.5	341.7	368.6	446.9	443.3	403.5	278.1	373.2	383.6	401.7	414.7	348.6

Sources: U. S. Department of the Interior, Bureau of Mines, CDA

(a) Preliminary

(b) Ingot makers consume refined copper, scrap copper, and alloying metal and ship copper alloy ingots to brass mills, foundries, powder plants, and other industries

Table 3, Item 15.

Net consumption of metals by brass mills, wire mills, foundries, powder plants, and other industries – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Net Metal Consumed (Table 3, Item 15)							
Metal Weight	2,426.8	2,629.6	2,848.4	3,075.4	3,324.3	3,742.4	3,157.1
Brass Mills (Table 3, Item 17)							
Copper (Copper Content)	908.4	978.8	1,063.7	1,149.6	1,232.1	1,425.4	1,065.8
Alloy (Alloy Content)	195.1	211.4	218.4	239.3	263.6	321.9	242.6
Brass Ingot (Metal Weight)	5.5	7.0	6.6	6.6	6.5	6.6	4.4
Total (Metal Weight)	1,109.0	1,197.2	1,288.7	1,395.5	1,502.2	1,753.9	1,312.8
Wire Mills (Table 3, Item 20)							
Copper (Copper Content)	835.0	935.0	1,027.0	1,111.0	1,228.0	1,376.0	1,274.0
Foundries (Table 3, Item 23)							
Copper (Copper Content)	128.1	140.1	154.3	164.7	164.9	165.4	155.8
Alloy (Alloy Content)	18.4	17.2	18.7	19.3	18.0	16.9	13.3
Brass Ingot (Metal Weight)	234.0	246.5	252.3	273.6	294.0	288.0	250.3
Total (Metal Weight)	380.5	403.8	425.3	457.6	476.9	470.3	419.4
Powder Plants (Table 3, Item 26)							
Copper (Copper Content)	17.5	19.7	20.7	23.9	25.3	28.4	22.6
Alloy (Alloy Content)	3.6	4.2	5.0	4.0	5.3	6.0	5.2
Brass Ingot (Metal Weight)	2.7	3.3	4.2	3.8	3.6	4.3	6.3
Total (Metal Weight)	23.8	27.2	29.9	31.7	34.2	38.7	34.1
Other Industries [(b)] (Table 3, Item 16)							
Copper (Copper Content)	50.7	50.9	48.5	55.1	55.9	60.4	53.9
Brass Ingot (Metal Weight)	27.8	15.5	29.0	24.5	27.1	43.1	62.9
Total (Metal Weight)	78.5	66.4	77.5	79.6	83.0	103.5	116.8

THOUSANDS OF SHORT TONS												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
3,163.3	3,583.9	3,231.1	3,280.6	3,695.4	3,935.2	3,567.8	2,526.0	3,246.0	3,497.1	3,774.0	3,847.3	3,297.7
1,129.5	1,315.7	1,107.1	1,152.4	1,245.6	1,326.9	1,233.2	845.3	1,104.1	1,160.5	1,224.3	1,280.7	1,095.9
286.5	335.1	258.1	282.9	353.1	358.8	320.5	216.3	294.9	296.8	317.8	334.3	278.6
5.2	6.5	6.2	13.2	16.7	14.5	23.9	5.6	8.3	7.3	7.5	4.5	4.0
1,421.2	1,657.3	1,371.4	1,448.5	1,615.4	1,700.2	1,577.6	1,067.2	1,407.3	1,464.6	1,549.6	1,619.5	1,378.5
1,186.0	1,295.0	1,338.7	1,324.9	1,526.3	1,672.3	1,474.3	1,061.3	1,364.0	1,511.2	1,672.7	1,653.0	1,442.8
141.5	171.2	153.4	130.9	139.6	153.3	144.1	112.6	116.7	123.7	127.3	133.0	116.3
13.0	16.4	15.4	11.1	13.1	12.0	11.6	9.0	11.4	12.3	15.5	14.3	11.0
268.1	280.5	209.2	222.6	241.3	239.6	224.6	154.4	171.3	190.2	203.4	206.3	159.0
422.6	468.1	378.0	364.6	394.0	404.9	380.3	276.0	299.4	326.2	346.2	353.6	286.3
25.8	26.3	18.7	23.7	25.5	30.0	29.7	18.4	28.6	29.6	30.0	32.5	27.0
5.4	4.8	3.7	4.0	3.8	4.4	3.7	2.3	3.7	3.7	4.1	3.7	2.1
5.9	6.9	7.3	5.6	5.3	6.9	3.2	1.1	2.1	3.2	3.7	4.0	3.0
37.1	38.0	29.7	33.3	34.6	41.3	36.6	21.8	34.4	36.5	37.8	40.2	32.1
49.1	82.8	79.2	74.3	87.1	77.5	66.0	66.5	86.1	101.1	125.3	129.6	113.0
47.3	42.7	34.1	36.0	38.0	39.0	33.0	33.2	54.8	57.5	42.4	51.4	45.0
96.4	125.5	113.3	110.3	125.1	116.5	99.0	99.7	140.9	158.6	167.7	181.0	158.0

Sources: U. S. Department of the Interior, Bureau of Mines, CDA

(a) Preliminary

(b) Chemical, Steel, Aluminum, and Other Industries

Table 4

Supply of mill, foundry, and powder products and their consumption in the end-use markets – 1961-1980

	1961	1962	1963	1964	1965	1966	1967
(1) Strip, Sheet and Plate (page 32)	707	784	809	923	1,021	1,314	1,007
(2) Rod, Bar and Mechanical Wire (page 32)	675	755	773	880	963	1,041	781
(3) Plumbing Tube and Pipe (page 32)	380	473	520	581	579	473	399
(4) Commercial Tube and Pipe (page32)	303	344	362	402	414	497	409
(5) Total Brass Mill Products (page 32)	2,065	2,356	2,464	2,786	2,977	3,325	2,596
(6) Bare Wire	173	165	171	201	207	269	235
(7) Communication Wire and Cable	358	370	444	519	539	565	543
(8) Building Wire							
(9) Magnet Wire							
(10) Power Cable							
(11) Apparatus Wire and Cordage	1,022	1,101	1,098	1,271	1,431	1,660	1,578
(12) Automotive Wire and Cable (exc. Magnet)							
(13) Other Insulated Wire and Cable							
(14) Total Wire Mill Products[(b)]	1,553	1,636	1,713	1,991	2,177	2,494	2,356
(15) Sand Castings	657	721	767	799	793	769	671
(16) Permanent Mold Castings	38	40	40	42	45	58	54
(17) Die Castings	16	16	17	20	21	26	20
(18) Other Castings	23	29	28	30	30	57	54
(19) Total Foundry Casting Products	734	806	852	891	889	910	799
(20) Total Powder Products	41	48	51	57	62	67	56
(21) Domestic Products – Total	4,393	4,846	5,080	5,725	6,105	6,796	5,807
(22) Net Imports (page 34)	66	67	81	127	127	232	177
(23) Products to Domestic Market – Total*	4,459	4,913	5,161	5,852	6,232	7,028	5,984
(24) Building Construction	1,341	1,518	1,608	1,796	1,895	1,995	1,632
(25) Transportation	489	552	577	639	711	757	594
(26) Consumer and General Products	622	658	679	796	873	1,166	1,077
(27) Industrial Machinery and Equipment	1,002	1,099	1,141	1,267	1,304	1,455	1,260
(28) Electrical and Electronic Products	1,005	1,086	1,156	1,354	1,449	1,655	1,421

*Markets include–Building Construction: Plumbing & Heating; Building Wiring; Air Conditioning & Commercial Refrigeration; Builders' Hardware; Architectural.

Transportation: Automobile; Truck & Bus; Railroad; Marine; Aircraft & Aerospace.

Consumer & General Products: Appliances; Fasteners & Closures; Military & Commercial Ordnance; Coinage; Utensils & Cutlery; Misc.

Industrial Machinery & Equipment: Heavy Industrial Equipment; Industrial Valves & Fittings; Heat Exchangers; Off-Highway Vehicles; Non-Electrical Instruments.

Electrical & Electronic Products: Telecommunications; Power Utilities; Lighting & Wiring Devices; Electronics (except Consumer).

METAL WEIGHT, millions of pounds												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
1,033	1,147	883	964	1,074	1,192	1,079	853	1,006	1,014	1,062	1,115	908
900	1,016	804	881	1,038	1,131	1,005	651	904	973	1,020	1,051	860
400	433	378	447	463	519	347	310	374	439	459	483	414
423	514	448	417	441	475	398	265	323	330	368	408	334
2,756	3,110	2,513	2,709	3,016	3,317	2,829	2,079	2,607	2,756	2,909	3,057	2,516
242	245	226	218	270	209	219	167	198	233	238	236	240
534	716	735	803	766	873	799	584	687	836	885	968	897
		484	552	580	666	557	483	545	658	718	694	
		466	427	496	537	446	338	451	516	525	530	
		274	236	262	295	292	216	206	233	237	256	
1,437	1,563	135	137	169	185	179	140	163	209	209	220	1,733
		36	46	67	74	64	54	72	90	94	79	
		67	69	90	79	89	81	75	80	89	88	
2,213	2,524	2,423	2,488	2,700	2,918	2,645	2,063	2,397	2,855	2,995	3,071	2,870
658	711	620	597	654	667	566	447	491	524	521	542	434
55	56	49	46	39	33	30	19	15	19	22	38	23
25	24	22	20	23	23	18	10	10	8	10	8	4
53	62	60	42	47	57	57	44	33	29	27	29	28
791	853	751	705	763	780	671	520	549	580	580	617	489
62	61	47	52	54	64	69	46	65	63	65	66	47
5,822	6,548	5,734	5,954	6,533	7,079	6,214	4,708	5,618	6,254	6,549	6,811	5,922
261	129	132	170	212	178	93	57	222	193	284	185	−20
6,083	6,677	5,866	6,124	6,745	7,257	6,307	4,765	5,840	6,447	6,833	6,996	5,902
1,639	1,808	1,634	1,812	2,015	2,179	1,735	1,382	1,707	1,942	2,095	2,107	1,792
652	720	588	678	761	886	733	585	835	909	882	846	599
1,122	1,137	880	859	994	991	961	772	798	820	930	994	823
1,281	1,377	1,223	1,178	1,313	1,398	1,229	880	1,051	1,137	1,215	1,229	1,056
1,389	1,635	1,541	1,597	1,662	1,803	1,649	1,146	1,449	1,639	1,711	1,820	1,632

Sources: U.S. Department of Commerce, Bureau of the Census, Bureau of Industrial Development; CDA

(a) Preliminary

(b) Copper Content

Table 4, Item 5.

Supply of brass mill products — 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Total Products — Metal Weight	2,065	2,356	2,464	2,786	2,977	3,325	2,596
Strip, Sheet and Plate	707	784	809	923	1,021	1,314	1,007
Copper	193	220	236	243	272	354	240
Copper Alloy	514	564	573	680	749	960	767
Rod, Bar and Mechanical Wire	675	755	773	880	963	1,041	781
Copper	97	107	110	135	152	161	130
Copper Alloy	578	648	663	745	811	880	651
Plumbing Tube and Pipe	380	473	520	581	579	473	399
Copper	352	445	489	547	548	448	381
Copper Alloy	28	28	31	34	31	25	18
Commercial Tube and Pipe	303	344	362	402	414	497	409
Copper	203	230	258	287	290	362	260
Copper Alloy	100	114	104	115	124	135	149

Supply of brass mill products in selected countries

	METAL WEIGHT, millions of pounds												
	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
Canada	261	269	231	221	236	281	264	192	223	232	272	264	184
France	497	597	585	580	598	667	603	476	569	586	590	638	668
Germany, F.R.	968	1,103	1,067	986	1,130	1,311	1,157	932	1,219	1,207	1,219	1,337	1,404
Italy	453	479	527	494	572	626	654	520	647	639	652	650	743
Japan	1,030	1,160	1,201	1,152	1,330	1,682	1,298	1,148	1,546	1,573	1,722	1,875	1,955
Scandinavia	272	277	279	260	286	316	316	247	285	295	321	348	340
Spain	110	138	132	133	167	193	181	133	178	183	174	191	186
Switzerland	99	110	116	104	100	114	118	81	96	116	105	111	120
United Kingdom	1,019	1,035	956	842	905	1,004	903	737	803	827	845	797	645
United States	2,756	3,110	2,513	2,709	3,016	3,317	2,829	2,079	2,607	2,756	2,909	3,057	2,516

Sources: United States—U.S. Department of Commerce, Bureau of Industrial Development; CDA
Other Countries—World Bureau of Metal Statistics
(a) Preliminary

MILLONS OF POUNDS												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
2,756	3,110	2,513	2,709	3,016	3,317	2,829	2,079	2,607	2,756	2,909	3,057	2,516
1,033	1,147	883	964	1,074	1,192	1,079	853	1,006	1,014	1,062	1,115	908
190	238	185	236	238	275	260	206	219	226	226	250	188
843	909	698	728	836	917	819	647	787	788	836	865	720
900	1,016	804	881	1,038	1,131	1,005	651	904	973	1,020	1,051	860
140	161	129	151	137	149	164	84	107	121	131	143	121
760	855	675	730	901	982	841	567	797	852	889	908	739
400	433	378	447	463	519	347	310	374	439	459	483	414
385	415	363	431	446	502	335	302	366	432	451	475	407
15	18	15	16	17	17	12	8	8	7	8	8	7
423	514	448	417	441	475	398	265	323	330	368	408	334
276	363	304	276	321	334	252	168	212	229	272	310	251
147	151	144	141	120	141	146	97	111	101	96	98	83

Sources: U.S. Department of Commerce, Bureau of Industrial Development; CDA

Table 4, Item 22.

Imports and exports of brass mill, wire mill, and powder products — 1961-1980

	1961	1962	1963	1964	1965	1966	1967
Net Imports — Metal Weight (Table 4, Item 22)	65.9	66.6	80.8	127.4	126.9	231.6	177.2
Imports — Metal Weight	115.3	119.7	130.4	177.2	191.6	289.8	235.3
Brass Mill Products — Metal Weight	105.3	109.9	120.0	145.2	150.6	248.1	202.2
Copper — Sheet, Strip and Plate	14.6	17.5	22.5	37.1	44.6	35.0	41.9
Rod, Bar and Mechanical Wire	—	—	—	3.6	2.6	5.2	2.8
Tube and Pipe	20.3	13.6	12.1	13.7	19.6	51.1	31.5
Copper Alloy — Sheet, Strip and Plate	25.3	28.8	30.1	29.6	30.0	63.8	59.8
Rod, Bar and Mechanical Wire	20.8	20.6	22.6	20.8	12.7	46.3	29.9
Tube and Pipe	24.3	29.4	32.7	40.4	41.1	46.7	36.3
Wire Mill Products	8.2	7.9	8.3	29.5	38.4	38.8	30.1
Copper — Rod	.5	.4	1.0	10.5	10.4	7.8	6.1
Copper — Bare and Insulated Wire	7.7	7.5	7.3	19.0	28.0	31.0	24.0
Powder Plant Products	1.8	1.9	2.1	2.5	2.6	2.9	3.0
Copper Alloy — Powder	1.8	1.9	2.1	2.5	2.6	2.9	3.0
Exports — Metal Weight	49.4	53.1	49.6	49.8	64.7	58.2	58.1
Brass Mill Products — Metal Weight	8.2	10.8	11.4	11.4	23.2	16.7	16.6
Copper — Sheet, Strip and Plate	.7	.7	.7	.8	2.3	1.6	1.8
Rod, Bar and Mechanical Wire	—	—	—	—	2.7	2.1	.7
Tube and Pipe	1.9	1.8	2.3	2.9	1.7	1.1	1.5
Copper Alloy — Sheet, Strip and Plate	1.2	2.3	1.4	2.2	6.9	2.4	2.2
Rod, Bar and Mechanical Wire	1.8	2.5	2.7	2.7	5.8	5.7	6.2
Tube and Pipe	2.6	3.5	4.3	2.8	3.8	3.8	4.2
Wire Mill Products	40.3	41.3	37.1	37.4	39.6	39.3	39.5
Copper — Rod	14.7	13.5	11.6	8.9	8.9	10.1	10.4
Copper — Bare Wire	4.0	5.7	6.3	10.4	7.0	6.3	8.8
Copper — Insulated Wire	21.6	22.1	19.2	18.1	23.7	22.9	20.3
Powder Plant Products	.9	1.0	1.1	1.0	1.9	2.2	2.0
Copper Alloy — Powder	.9	1.0	1.1	1.0	1.9	2.2	2.0

MILLIONS OF POUNDS												
1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980[a]
260.8	128.6	131.8	169.8	212.4	178.2	92.5	57.3	222.3	192.8	283.7	185.3	−20.1
312.1	195.3	204.7	251.6	300.4	311.0	259.3	196.9	356.1	361.8	495.1	438.5	296.0
267.6	168.1	165.0	219.2	265.7	266.4	202.8	164.4	300.1	306.8	434.6	375.8	247.5
77.5	30.9	26.9	38.7	45.7	48.7	46.9	37.8	59.9	64.7	85.8	80.1	55.7
8.7	1.4	3.5	4.1	6.1	6.0	6.7	4.2	6.6	8.0	17.5	17.0	12.0
48.7	31.4	36.4	43.1	51.6	55.0	31.3	24.3	33.7	39.9	46.3	44.8	22.9
64.6	45.5	47.8	74.4	92.4	84.9	57.2	51.4	104.6	105.7	155.4	123.6	80.7
17.7	14.0	10.1	11.3	16.8	23.6	20.3	14.3	48.0	41.3	60.1	55.9	32.6
50.4	44.9	40.3	47.6	53.1	48.2	40.4	32.4	47.3	47.2	69.5	54.4	43.6
41.0	24.4	37.4	30.0	32.0	42.3	54.8	30.9	53.4	52.6	58.0	60.4	46.5
13.0	2.4	2.4	3.0	3.0	5.3	2.8	1.5	2.5	13.8	7.0	6.2	5.4
28.0	22.0	35.0	27.0	29.0	37.0	52.0	29.4	50.9	38.8	51.0	54.2	41.1
3.5	2.8	2.3	2.4	2.7	2.3	1.7	1.6	2.6	2.4	2.5	2.3	2.0
3.5	2.8	2.3	2.4	2.7	2.3	1.7	1.6	2.6	2.4	2.5	2.3	2.0
51.3	66.7	72.9	81.8	88.0	132.8	166.8	139.6	133.8	169.0	211.4	253.2	316.1
16.0	21.8	27.1	30.6	33.6	68.6	87.8	53.4	48.6	48.6	59.5	96.9	139.1
1.7	3.2	3.3	1.5	.9	1.8	2.2	0.8	1.4	4.2	2.9	3.3	6.7
2.2	2.0	3.7	1.0	1.8	4.4	2.7	8.1	1.4	2.6	3.6	8.1	17.1
1.2	1.9	2.1	2.5	2.3	15.5	13.5	4.4	5.1	6.2	5.8	18.8	38.9
2.4	4.6	4.5	4.2	7.7	12.2	14.5	6.4	8.3	8.6	9.0	10.4	17.3
5.4	6.6	10.2	16.3	16.8	21.0	38.8	20.5	20.0	20.0	26.2	23.4	28.1
3.1	3.5	3.3	5.1	4.1	13.7	16.1	13.2	12.4	7.0	12.0	32.9	31.0
33.0	41.4	42.8	47.3	50.7	59.2	73.6	83.7	81.5	116.9	148.1	152.4	172.9
5.4	7.2	8.3	14.6	10.9	10.4	14.0	10.9	8.5	11.2	15.4	34.8	73.4
4.1	8.1	4.2	2.9	4.3	7.7	4.4	3.2	6.2	7.2	10.9	13.6	7.9
23.5	26.1	30.3	29.8	35.5	41.1	55.2	69.6	66.8	98.5	121.8	104.0	91.6
2.3	3.5	3.0	3.9	3.7	5.0	5.4	2.5	3.7	3.5	3.8	3.9	4.1
2.3	3.5	3.0	3.9	3.7	5.0	5.4	2.5	3.7	3.5	3.8	3.9	4.1

Sources: U.S. Department of Commerce, Bureau of the Census; CDA

(a) Preliminary